

REMARKS/ARGUMENTS

Claims 5-39 remain pending herein with the present amendments. Applicant appreciates the courtesy of the Examiner and of Primary Examiner Anil Khatri for granting the in-person interview that was conducted on October 5, 2004. During the interview, the undersigned stressed features of the invention which distinguish it from the art cited by the Examiner. In particular, it was highlighted the feature of the invention in analyzing the first instructions en masse to determine information representing an information flow in accordance with the first instructions. Based on that information representing the information flow, the target instructions are then generated. It was also highlighted the invention's feature of generating the target instructions, in preference over particular operations specified by individual ones of the plurality of first instructions. While the discussion was productive, no agreement was reached to allow the claims of the application during the interview. However, Applicant submits that the present amendments address all of the outstanding concerns expressed in the Official Action, and for that reason, the presently pending claims overcome the rejections made therein.

Turning now to the specific points of the Official Action, the title is amended herein in the manner required by the Examiner to more clearly indicate the subject matter to which the claims are directed. In addition, the claims have been amended herein to address the 35 U.S.C. § 112 rejections by substituting the words "by an information processing system" for the word "automatically" which formerly appeared in claims 5 and 24, and by amending claim 32 to claim "an information processing system" and deleting the word "automatically" from that claim.

In the Official Action, all pending claims were rejected under 35 U.S.C. § 103(a) as being obvious over U.S.

Patent 6,031,992 to *Cmelik et al.* ("*Cmelik*"), in view of U.S. Patent 6,708,325 to *Cooke et al.* ("*Cooke*"), or further in view of allegedly admitted prior art. For the reasons set forth below, Applicant respectfully submits that the presently pending claims now overcome the rejections.

As amended herein, claim 5 now recites a method of generating target instructions from a plurality of first instructions, the target instructions being executable on a target processor. In such method, the plurality of first instructions are analyzed en masse by an information processing system to break down the functional operations encoded by the first instructions to produce information representing an information flow according to the first instructions. The target instructions are then generated by an information processing system based on the information representing the information flow, in preference over particular operations specified by individual ones of the plurality of first instructions.

These features of the invention are neither taught nor suggested by the combination of *Cmelik*, in view of *Cooke*. *Cmelik* merely describes a system which translates first instructions (referenced as "target instructions" in *Cmelik*) individually and directly into second instructions (referenced as "host primitives"), after which the stream of host primitives is examined, reordered, and reduced in order to reduce the number of such primitives. (Col. 15, lns. 30-34.) This ordering of operations, which can be called "translate to new instructions first, then optimize," contrasts with the "analyze first en masse, then generate new instructions" approach that is set forth in claim 5. Moreover, *Cooke* neither teaches nor suggests the features which *Cmelik* lacks with respect to the invention recited in claim 5. The passages of *Cmelik* cited by the Examiner merely relate to automatically compiling a program

written in a *high-level language* to a program executable on an application specific integrated circuit (ASIC). *Cmelik* neither teaches nor suggests analyzing the first instructions *en masse* to determine information representing an information flow according to the first instructions, then using that information to generate target instructions. Claims 24, 32, and 39, which contain similar recitations, distinguish over *Cmelik* and *Cooke* for the same reason.

Moreover, the compiling of high-level language instructions into ASIC instructions is the direct antithesis of that recited in claims 9, 26, and 33, in which the first instructions are recited to be according to a first machine language and of a type executable by a first processor, not the target processor, and the target instructions are recited to be according to a second machine language and of a type executable by the target processor but not the first processor.

Support for present amendments is provided, *inter alia*, at page 11, lines 15-19; page 13, line 21; page 20, lines 14-17; and page 14, lines 22-23 of the Specification.

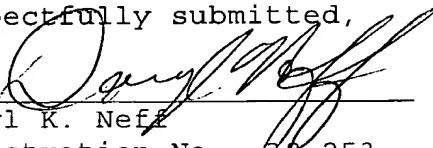
In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone Applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: October 26, 2004

Respectfully submitted,

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